Dairy Situation

Economics, Statistics, and Cooperatives Service

U.S. Department of Agriculture

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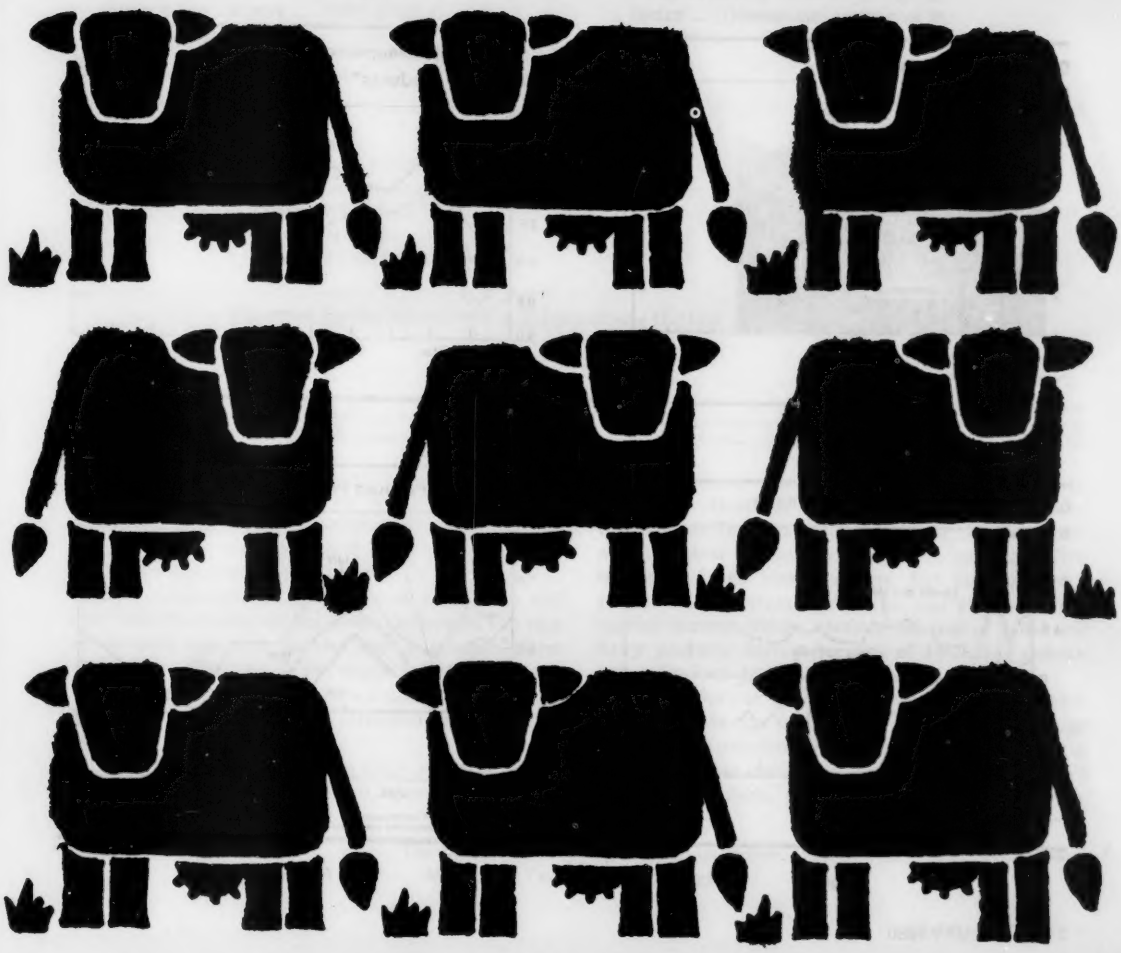
Approved by the World Food and Agricultural Outlook and Situation Board



U.S. Milk Production by Months

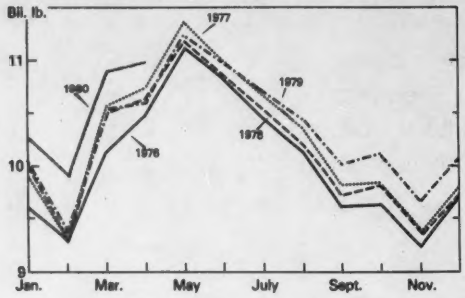


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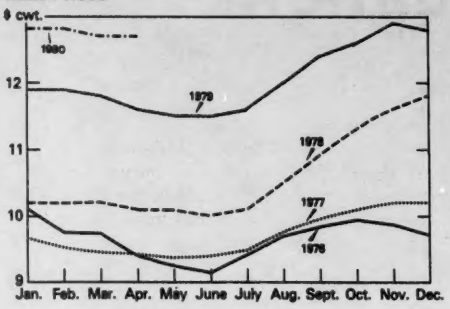
Figure 1

Milk Prices*



*U.S. average price received by farmers for deliveries to plants and dealers.

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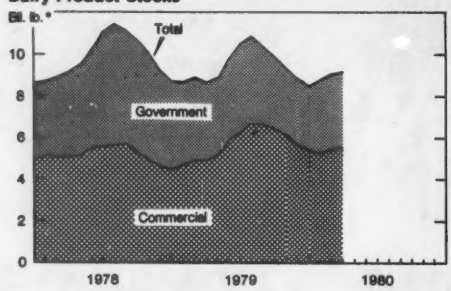
Figure 2

Dairy Product Stocks*



*As of first of month. Milk equivalent, fat-solids basis.

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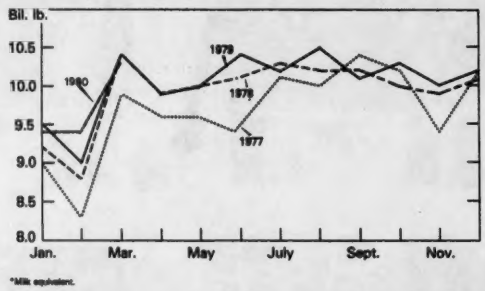
Figure 3

Commercial Disappearance of Milk in All Products*



*Milk equivalent.

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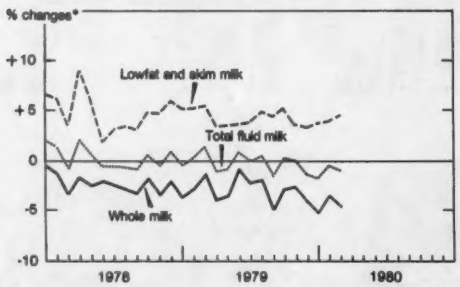
Figure 4

Daily Average Sales of Fluid Milk Items



*Per cent sales adjusted for calendar composition.

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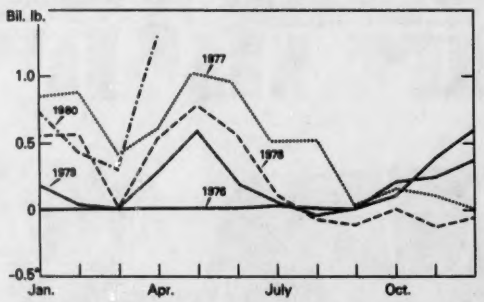
Figure 5

USDA Dairy Product Purchases*



*Net removals, milk equivalent, fat-solids basis.
Negative figures denote domestic sales exceeded purchases.

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SUMMARY

Supplies of milk and dairy products are increasing in 1980, while commerical use of dairy products has weakened. As a result, commercial stocks are ample, CCC purchases are heavy, and farm milk prices are still below the new support level.

Milk production during the rest of 1980 likely will continue above year-earlier levels, althought the rate of increase may slow as the year progresses. Farm milk prices may rise to the support price in coming months, but any increase above support will be limited unless commercial use strengthens more than currently expected.

Commercial use of milk and dairy products during January-March was down by 0.2 percent from last year. American cheese use declined by 3 percent, more than offsetting a 4-1/2 percent gain in sales of cheese-other-than-American. Commercial disappearance of butter was nearly even with a year ago. With continued large meat supplies, the economy in a recession, and futher declines in real disposable per capital income likely, commercial use of milk and dairy products during the rest of 1980 may remain below the high 1979 levels.

Milk production during the first 4 months of 1980, on a daily average basis, was 3 percent above a year earlier. This resulted from relatively large gains in output per cow, reflecting quite favorable milk-feed price relationships. Also, because of reduced culling

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and a large number of replacements, milk cow numbers have stabilized thus far this year. Cow numbers in March and April were above year-earlier levels. All five of the major dairy States posted production gains in April with the 5.4 percent increase in California the largest.

Production is expected to rise substantially—3 percent over last year during April-June—but output gains in the second half may slow from a year ago. The levels of production will depend on cow numbers, weather and pasture conditions, farm milk prices, feed prices, and other production costs. These uncertainties suggest that for all of 1980, milk production could show an increase of 2 to 3 percent above the 123.6 billion pounds produced in 1979.

The milk-feed price ratio has continued favorable in 1980. In 1979, the annual average value of concentrates fed per 100 pounds of milk produced was $2.95, up 13.5 percent from 1978. Even though feed costs were up, sharply higher milk prices received by dairy farmers brought returns over concentrate costs to $9.05 per 100 pounds of milk, 13.1 percent above the previous year.

Cash receipts to dairymen during January-April were up about 12 percent from a year ago. Cash receipts could exceed $16-1/2 billion this year, and the net income position of dairy farmers should approximate the favorable situation of the past few years.

Wholesale prices of butter, nonfat dry milk and cheese were below support purchase prices in mid-May, reflecting heavy milk supplies, ample commercial stocks, and weak sales.

The price stability in wholesale markets this past winter was reflected in the slowing of retail dairy product price increases in recent months. For all of 1980, retail prices will probably average 9 to 11 percent higher than last year.

First-quarter production of butter, nonfat dry milk, and cheese was up substantially as milk supplies remained heavy. Manufactured output will continue to run above year-earlier levels through late spring and early summer, as there will be more milk available. Last year, a record 67.4 billion pounds was used to manufacture dairy products 2 percent more than in 1978.

Commercial stocks of dairy products on April 1 reflected the large manufactured output and sluggish sales during 1980. Milkfat stocks were 15 percent more than a year earlier, while solids-not-fat holdings were a fourth larger.

January-April purchases of dairy products by CCC totaled 2.8 billion pounds milk equivalent, nearly a third larger than removals for all of 1979. April purchases of 1.3 billion pounds were the largest in any one month since June 1971.

Quota-type cheese imports during January-March were down substantially from a year ago. This was due largely to heavy imports entering during December in anticipation of new import quotas, and in part to delays in licensing importers. On a milk equivalent basis, imports were 5 percent less than a year ago as increased imports of most other dairy products nearly offset the lower cheese imports.

Early 1980 milk production was well above year-earlier levels in the European Community, while output decreased substantially in the Soviet Union, the world's largest milk producing nation. Lower output in the Eastern Europe and strong import demand by developing nations resulted in brisk international dairy product trade in early 1980.

DAIRY SITUATION

SITUATION AND OUTLOOK

PRODUCTION

Milk Output Well Above Year Ago Levels

Milk production for the first 4 months of 1980, on a daily average basis, was 3.0 percent greater than during the same period in 1979. Output in April was 3.2 percent larger, the twelfth straight month that production has been up from year-earlier levels.

Recent increases in output over year-earlier levels resulted from relatively large gains in output per cow and little change in milk cow numbers. In fact, April was the ninth consecutive month that year-to-year gains in output per cow exceeded 3 percent. Following 6 straight months of relatively small year-to-year declines, cow numbers were reported above year-ago levels in March and April for the first time since 1954.

The recent increase in milk cow numbers, when a decline is normal, reflect the favorable milk-feed price relations, as well as lower utility cow prices and a large replacement herd. Dairymen have probably lowered their herd culling rates because of good returns over concentrate costs and a relative low salvage value for cows. Given the lower culling rates and a large influx of replacements, the dairy herd has expanded slightly.

The increased output per cow also reflects the quite favorable milk-feed price relationships of the last year. For 1980 the ratio has been running slightly below 1979 but substantially above the 1970-79 average of 1.42. As expected, given the milk-feed ratio, dairymen on April 1 reported feeding 4.5 percent more grain and other concentrates than a year earlier. That increase follows a year-to-year increase of 2.7 percent reported for January 1.

Milk production was up in all five of the major producing States during April. California and New York posted major gains over a year ago of 5.4 percent and 3.1 percent, respectively. Wisconsin had a more modest increase of 2.4 percent, as did Minnesota with 2.1 percent, followed by Pennsylvania with 1.5 percent. Of the 33 reporting States, 12 reported gains in April of 4 percent or more. In addition, 15 States indicated gains of less than 4 percent, leaving only 6 with output equal to or lower than year-earlier levels.

All of the farm production regions reported increased April-to-April milk production. Leading the way was the Mountain region with a 6.3 percent gain, the Pacific region with 5.4 percent, and the Corn Belt up 4.1 percent.

U.S. milk production

Month	1979	1980	Change
	Million pounds		*Percent*
January	10,004	10,260	+2.6
February	9,317	9,917	+6.4
March	10,526	10,881	+3.4
April	10,600	10,942	+3.2
May	11,226		
June	10,973		
July	10,698		
August	10,439		
September	10,014		
October	10,108		
November	9,657		
December	10,061		
Total	123,623		

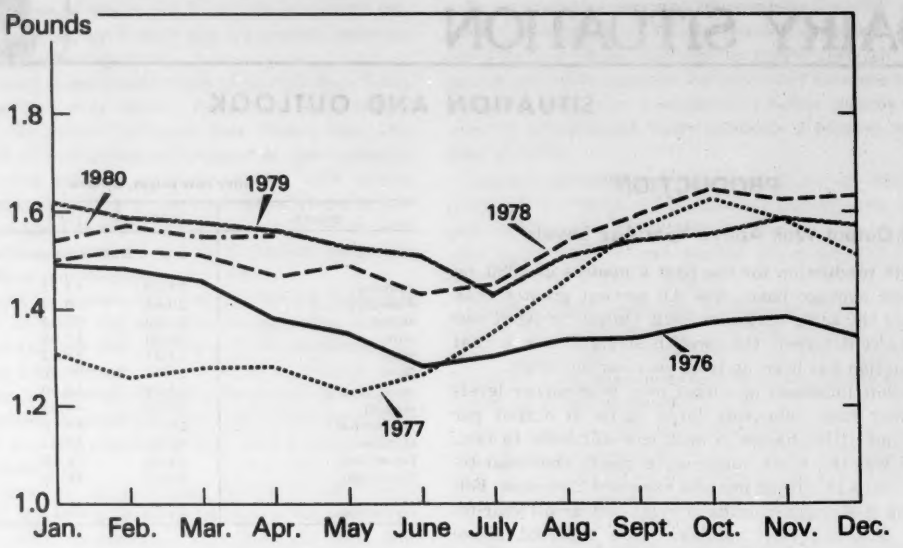
Utility cow prices, Omaha

Month	1978	1979	1980
	Dollars per cwt.		
January	27.59	47.33	47.94
February	29.45	50.81	51.22
March	32.44	52.94	48.80
April	36.94	57.00	45.73
May	39.21	55.51	
June	37.61	50.60	
July	38.09	47.80	
August	37.85	48.33	
September	39.75	49.65	
October	40.46	47.71	
November	39.30	46.49	
December	41.85	46.98	
Average	36.71	50.10	

Milk-Feed Price Ratio Quite Favorable

The April milk-feed price ratio stood at a favorable 1.55, about the same as a year earlier and equaling the 1979 average (figure 7). The ratio has remained constant since both milk prices and feed prices have increased in like proportions. The average price of

Milk-Feed Price Ratio*



*Pounds of 16% protein ration equal in value to one pound of milk sold to plants and dealers.

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Figure 7

Milk-feed price ratio[1]

Month	1978	1979	1980
		Pounds	
January	1.50	1.61	1.54
February	1.52	1.59	1.57
March	1.51	1.58	1.55
April	1.47	1.56	1.55
May	1.47	1.53	
June	1.43	1.51	
July	1.45	1.43	
August	1.54	1.50	
September	1.59	1.54	
October	1.64	1.55	
November	1.62	1.58	
December	1.63	1.57	
Average	1.53	1.55	

[1] Pounds of 16% protein ration equal in value to 1 pound of milk.

16-percent protein dairy ration on April 15 was $164 per ton, up $15 (10 percent) from a year ago, but unchanged from mid-March.

Meanwhile, prices of major feed ingredients did not increase as much as dairy ration prices. In mid-April, No. 2 yellow corn at Chicago was quoted at $2.61 per bushel, 3 percent above a year ago, while soybean meal (44 percent protein, Decatur) averaged $153.50 per ton, down 18 percent.

Baled alfafa hay in mid-April averaged $68.50 per ton, up nearly 30 percent from a year earlier. However, prices ranged widely; from $112 in Arizona, up a half from last year, to $31.50 in South Dakota, down 5 percent.

It is still early to have any firm indications of feed supplies and prices for the next crop marketing year. Farmers reported on April 1 that they intended to plant 82 million acres of corn, about 3 percent more than in 1979, with feed grain (corn, sorghum, barley, and oats) plantings to total 120 million acres, 2 percent above a year earlier. Intended planted acres of soybeans, at 71.3 million, are down less than 1 percent from 1979.

With expected large ending stocks of soybeans and a large crop this fall, soybean meal prices are expected to be below year-ago levels for the rest of 1979/80. Meanwhile, corn prices are expected to remain above last year due to strong demand and the removal of corn from the market through the reserve program

and Government purchases. On balance, dairy feed ration costs are expected to be up, due mainly to increased processing and marketing costs for feed.

During 1979, the annual average value of concentrates fed per 100 pounds of milk produced was $2.95, up 13.5 percent from 1978, as the amount fed and its cost increased proportionately more than milk output (table 1). However, even though feed costs were higher, sharply higher milk prices received by dairy farmers brought returns over concentrate costs to $9.05 per 100 pounds of milk, 13.1 percent above the previous year. On a per cow basis, the value of concentrates fed during 1979 was $338, up $46 (15.8 percent) from 1978, with an average of 5,060 pounds of grain and other concentrates fed, up 5.4 percent.

Production Increases to Continue

The milk production expansion, which started in early 1979, is expected to continue, at least through the rest of 1980. First quarter production was up 4.1 percent (2.9 percent on a daily average basis), and second quarter production will likely be up 3 to 4 percent. Thus, assuming little change from second-half 1979, a gain of 1.7 percent has already been ensured for 1980. However, economic conditions should remain relatively favorable for dairymen in the second half and milk output is expected to be up somewhat.

Feed prices are not likely to be significantly higher than a year ago during second-half 1980, while farm milk prices will advance from last year. Thus, milk-feed price relationships are expected to be fairly advantageous, implying that more concentrates will be fed per dairy cow. However, nonfeed production costs are expected to increase substantially.

Milk output per cow was up a substantial 4 percent during the first quarter, and is likely to be up 2 to 4 percent in the April-June quarter. Year-to-year gains in milk per cow during second-half 1980 will likely taper off as this year's output per cow is compared with the large increases posted in the last half of 1979. Grain feeding rates at that time were up nearly 7 percent, an increase not likely to be matched this year. In addition, last year's very favorable weather and the resulting pasture conditions, which were very conducive to high milk output per cow, are not likely to be repeated. Dairy pastures as a percent of normal, averaged 83 percent in 1979 for the April 1 to November 1 period, compared with an average of 78 percent for 1969-78. This year April 1 and May 1 ratings were equal to the 1969-78 average.

Dairy cow numbers during early 1980 have exhibited an unusual pattern, changing little from January, and on average have equaled year-earlier levels. Dairymen will probably return to more normal culling rates, and thus the 1980 decline in cow numbers may be similar to the 1/2 percent decline in 1979.

The expanded production of the last 3 quarters seems likely to continue for the rest of this quarter, leaving milk output up 3-1/2 to 4 percent for the first half of 1980. Second half production will depend upon many factors, including cow numbers, weather and pasture conditions, farm milk prices, feed prices, and other production costs. If milk cow numbers decline by 0.75 percent and gains in milk output per cow moderate, production for the second half could be equal to or up less than 1/2 percent.

Table 1—Milk-feed price relationships, 1965-79

Year	All milk sold to plants	Ration value	Milk-feed ratio[1]	Milk-feed difference	Returns over concentrate cost
	Dol. per cwt.	*Dol. per cwt.*	*Pounds*	*Dol. per cwt.*	*Dol. per cwt. of milk*
1965	4.23	3.03	1.18	1.20	3.12
1966	4.81	3.15	1.30	1.66	3.63
1967	5.02	3.23	1.35	1.79	3.78
1968	5.24	3.10	1.47	2.14	4.03
1969	5.49	3.15	1.54	2.34	4.21
1970	5.71	3.28	1.53	2.43	4.32
1971	5.87	3.44	1.49	2.43	4.41
1972	6.07	3.52	1.52	2.55	4.60
1973	7.14	4.88	1.28	2.26	5.02
1974	8.33	6.23	1.22	2.10	5.68
1975	8.75	6.25	1.31	2.50	6.12
1976	9.66	6.31	1.37	3.35	7.03
1977	9.72	6.21	1.39	3.52	7.11
1978	10.60	6.08	1.53	4.51	8.00
1979	12.00	6.68	1.55	5.44	9.05

[1] Pound of 16% protein ration equal in value to 1 pound of milk.

However, if cow numbers continue at the present level and factors combine such that increases in output per cow continue to be 3 to 4 percent, production for the second half of the year would be up 2 to 3 percent. Thus, for all of 1980, milk production could increase by 2 to 3 percent over 1979.

1979 Marketings Increased

Dairy farmers marketed a record 121 billion pounds of milk in 1979, up 2 billion (1.8 percent) from 1978. Last year's marketings were 9 billion pounds larger than 1973, the low point in marketings for the 1970's.

Whole milk sold to plants and dealers continued to account for nearly all of total milk production—96.7 percent in 1979, compared with 96.5 percent in 1978 and 93.5 percent a decade earlier (table 2). Meanwhile, sales of farm-separated cream continued to decline, down 22 million pounds (21 percent) from 1978, and less than 0.1 percent of total milk production. Direct sales to consumers were nearly unchanged from 1978 and continued to be only 1-1/4 percent of milk output.

Use of milk on farms where produced in 1979 at 2.5 billion pounds was 2 percent of total production, down 0.2 billion from 1978 and 1.8 billion from a decade ago. The use of milk on farms has continued to decline because of fewer people on farms and the increased use of milk replacers in feeding calves.

Milk eligible for the fluid market (Grade A) in 1979 was 83 percent of all milk sold to plants and dealers, unchanged from 1978 and up from two-thirds in 1960 (table 3 and figure 8). In recent years, the percentage of milk eligible for fluid use has grown about 1 percentage point per year, but

Manufacturing grade milk marketed

State	1969	1974	1978	1979
	Billion pounds			
Wisconsin	8.5	7.1	6.8	6.9
Minnesota	6.9	5.7	4.1	4.1
Iowa	3.0	2.0	1.6	1.6
Missouri	1.2	1.1	.8	.7
South Dakota	1.1	1.1	1.0	1.0
Idaho	1.0	1.0	1.0	1.0
Nebraska	.8	.8	.5	.5
California	.8	.7	.5	1.0
Kentucky	.8	.6	.4	.4
Illinois	.8	.6	.4	.5
United States	29.3	23.9	20.1	20.5

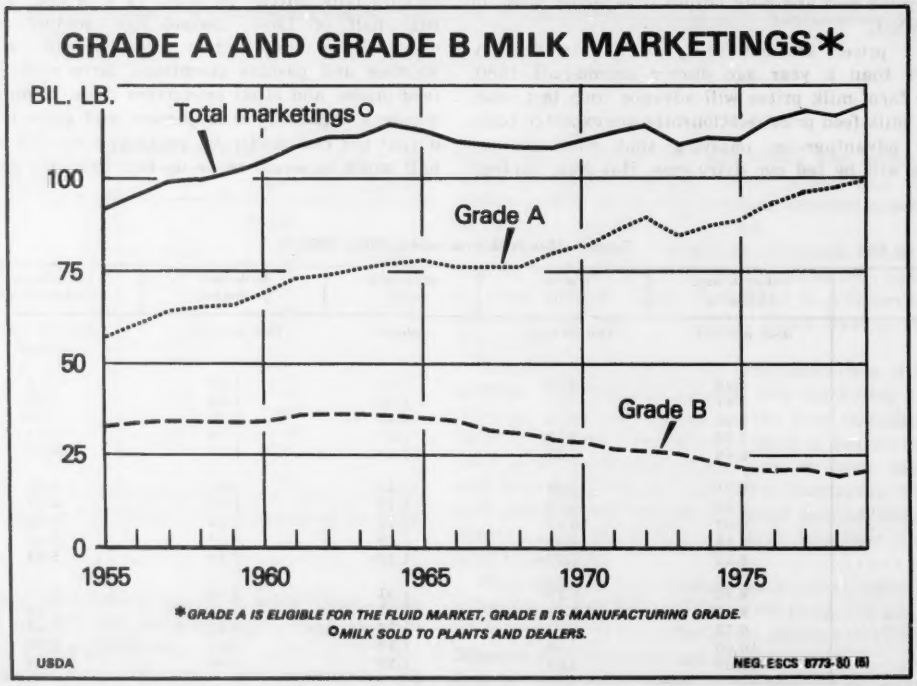

Figure 8

Table 2--Milk used and marketed by farmers, United States, specified years, 1965-79

Year	Milk used on farms where produced				Milk marketed by farmers				Total milk production on farms 1/ 3/
					Sold to plants and dealers				
	Fed to calves 1/	As fluid milk or cream 2/	For farm-churned butter	Total 3/	As whole milk	As farm-skimmed cream	Sold directly to consumers 4/	Total 3/	
	Billion pounds								
1965	2.1	3.4	.5	6.0	112.7	3.7	1.8	118.2	124.2
1966	2.0	3.1	.4	5.5	109.7	3.0	1.7	114.4	119.9
1967	1.9	2.9	.3	6/ 5.2	109.4	2.4	1.8	113.6	118.7
1968	1.8	2.6	.2	4.7	108.8	2.0	1.8	112.6	117.2
1969	1.7	2.4	.2	4.3	108.5	1.6	1.7	111.8	116.1
1970	1.7	2.2	.1	4.0	110.0	1.2	1.7	113.0	117.0
1971	1.6	2.1	N.A.	3.7	112.2	1.0	1.6	114.8	118.6
1972	1.6	1.9	N.A.	3.6	114.0	.8	1.5	116.3	120.0
1973	1.6	1.8	N.A.	3.4	109.8	.7	1.5	112.0	115.5
1974	1.6	1.7	N.A.	3.3	110.3	.4	1.5	112.3	115.6
1975	1.6	1.5	N.A.	3.1	110.4	.3	1.6	112.3	115.3
1976	1.6	1.4	N.A.	3.0	115.6	.2	1.5	117.3	120.3
1977	1.5	1.3	N.A.	2.8	118.2	.2	1.5	119.9	122.7
1978	1.5	1.2	N.A.	2.7	117.3	.1	1.5	118.9	121.6
1979 5/	1.4	1.0	N.A.	2.5	119.5	.1	1.5	121.1	123.6
	As a percentage of total milk production								
	Percent								
1965	1.7	2.7	.4	4.8	90.7	3.0	1.4	95.2	100.0
1966	1.7	2.6	.3	4.6	91.5	2.5	1.4	95.4	100.0
1967	1.6	2.4	.3	4.4	92.2	2.0	1.5	95.7	100.0
1968	1.5	2.2	.2	4.0	92.8	1.7	1.5	96.1	100.0
1969	1.5	2.1	.2	3.7	93.5	1.4	1.5	96.3	100.0
1970	1.5	1.9	.1	3.4	94.0	1.0	1.5	96.6	100.0
1971	1.3	1.8	N.A.	3.1	94.6	.8	1.3	96.8	100.0
1972	1.3	1.6	N.A.	3.0	95.0	.7	1.3	96.9	100.0
1973	1.4	1.6	N.A.	2.9	95.1	.6	1.3	97.0	100.0
1974	1.4	1.5	N.A.	2.9	95.4	.3	1.3	97.1	100.0
1975	1.4	1.3	N.A.	2.7	95.7	.3	1.4	97.4	100.0
1976	1.3	1.2	N.A.	2.5	96.1	.2	1.2	97.5	100.0
1977	1.2	1.1	N.A.	2.3	96.3	.2	1.2	97.7	100.0
1978	1.2	1.0	N.A.	2.2	96.5	.1	1.2	97.8	100.0
1979 5/	1.1	.8	N.A.	2.0	96.7	.1	1.2	98.0	100.0

1/ Excludes milk sucked by calves.
2/ Includes farm-churned butter.
3/ May not add due to rounding.
4/ By producers who sell only milk from their own herds. Also includes milk produced by institutional herds.
5/ Preliminary.
6/ Includes some milk used for other purposes on farms or not utilized.

Table 3—Fluid grade milk as percent of all milk sold by farmers to plants and dealers, 1950-79

Year	Atlantic		North Central		South Central	Western	United States
	North	South	West	East			
	Percent						
1950	97	83	37	44	62	59	61
1955	98	87	34	48	67	64	63
1960	99	90	31	55	73	74	67
1965	99	93	28	60	78	82	69
1966	99	94	28	61	80	84	69
1967	99	94	29	60	80	84	70
1968	99	94	31	62	81	84	70
1969	99	95	35	66	83	85	73
1970	99	96	38	68	84	85	74
1971	99	96	41	69	86	85	76
1972	99	96	43	71	86	85	77
1973	99	97	44	71	88	86	77
1974	99	98	46	73	89	88	79
1975	99	98	49	75	89	88	80
1976	99	98	52	75	91	90	81
1977	99	98	54	76	89	91	82
1978	99	98	57	76	91	91	83
1979	99	98	57	77	91	86	83

[1] Percentage eligible for fluid use (Grade A in most States). Includes fluid grade milk used in manufactured products.

1979 broke that trend. In the past, the growth in the share of fluid grade milk has resulted from a decline in total Grade B production, while Grade A production has tended to increased. Some of the increased Grade A production has been due to a conversion from Grade B to Grade A.

In 1979, total Grade B milk marketings were up 0.4 billion pounds, an increase of 2 percent. California doubled its marketings of manufacturing grade milk. As in the past, more than three-fifths of the 20.5 billion pounds of Grade B milk sold during 1979 was in Wisconsin, Minnesota, and Iowa.

PRICES AND INCOME

Farm Milk Prices Steady

Prices paid to farmers for milk have been fairly stable thus far in 1980. Farmers received an average $12.70 per hundredweight for all milk during March and April, a dime less than in January and February. This decrease can be attributed to lower fluid sales and seasonally lower fat content. The March-April all-milk price averaged 8-1/2 percent higher than last year, contrasted with a year-to-year increase of about 15 percent a year ago.

Manufacturing grade milk prices during January-March averaged 15 cents above the support level (when adjusted for fat content). This relative price strength in spite of large milk supplies may have been partly due to dairy product manufacturers competing more aggressively for milk to build inventory levels before the new support price of milk went into effect April 1. Although the April manufacturing milk price was 18 cents higher than in March (at 3.67 fat test), it was still 46 cents below the new support price. With large year-to-year gains in milk production and the onset of the flush season, as well as recent languid dairy product demand, several more months may elapse before manufacturing grade milk prices reach support.

Minimum Class I prices in Federal order markets will average $13.78 per 100 pounds of milk during June, up 8 percent from a year ago. Class I

Milk prices received by farmers

Month	All sold to plants			Manufacturing grade		
	1978	1979	1980	1978	1979	1980
	Dollars per 100 pounds					
January	10.20	11.90	12.80	9.17	10.90	11.80
February	10.20	11.90	12.80	9.21	10.80	11.70
March	10.20	11.80	12.70	9.27	10.80	11.80
April	10.10	11.60	12.70	9.30	10.70	11.90
May	10.10	11.50		9.26	10.80	
June	10.00	11.50		9.24	10.80	
July	10.10	11.60		9.28	10.80	
August	10.50	12.00		9.62	11.10	
September	10.90	12.40		9.96	11.40	
October	11.30	12.60		10.50	11.60	
November	11.60	12.90		10.80	11.70	
December	11.80	12.80		10.90	11.80	
Average	10.60	12.00		9.71	11.10	

minimum prices likely will trend upward during the summer as the Minnesota-Wisconsin price for manufacturing milk, the basic mover of prices in Federal milk orders, adjusts to the higher support price.

Estimated over-order payments in Federal order markets remain relatively stable. During the latter part of April and early May, a number of cooperatives announced increases of around 45 cents per hundredweight in their negotiated Class I prices charged to handlers. The estimated average over-order payment in Federal order markets was 65 cents per hundredweight in May. Over the last 10 months, over-order payments have ranged from 59 cents to 69 cents and averaged 63 cents.

During the next few months, manufacturing grade milk prices should rise toward the new support price, following increases in market prices of dairy products as manufacturers work off pre-April 1 accumulated stocks and replenish inventories. Year-to-year gains in coming months will likely be between 10 and 15 percent.

Wholesale prices for all milk will rise counterseasonally during the next few months. With April manufacturing prices below support, it is unlikely they will decline, even with the expected large supply of milk and sluggish dairy sales. In addition, prices of milk used for fluid products will be higher based on the Minnesota-Wisconsin price from previous months. Thus, all milk prices will probably average 12 to 13 percent higher than last year during second-quarter 1980.

If milk production continues substantially above year-earlier levels during the second half of the year and there's no pickup in demand, little seasonal strengthening in prices can be expected. The current large stock levels suggest there is not likely to be any substantial bolstering in prices due to demand for building inventories, as occurred last year. In addition, the current 105 percent of CCC purchase price sell-back policy will also limit incentive to build commerical stock levels. However, if commercial use rises above a year ago and milk production increases taper off, prices could strengthen some. The new support price of manufacturing grade milk and CCC purchase and sell-back prices effective October 1 will also impact on farm milk prices later this year. All things considered, farm milk prices for all of 1980 probably will average 10 to 12 percent more than the $12.00 per hundredweight of 1979.

Support Price Adjusted

As required by legislation, the milk support price must be adjusted at midyear of the dairy marketing year to reflect change in the index of prices paid by farmers for commodities and services, interest, taxes and wage rates (parity index). Thus, effective April 1, the support price for manufacturing grade milk was increased 85 cents to $12.07 per 100 pounds of milk containing 3.5 percent milkfat ($12.36 at the annual average fat test of 3.67 percent). The gain resulted from the 7.6 percent increase in the parity index since the start of the current marketing year (October 1, 1979).

Given the higher support price, the calculated CCC purchase price for butter was increased 9-1/4 cents per pound to $1.4058 in Chicago ($1.4325 in New York). Nonfat dry milk purchase prices were raised 5-1/2 cents per pound to $.895 for nonfortified and $.9075 for fortified product. CCC prices for cheese were increased 8-1/2 cents to $1.325 for 40-pound blocks and $1.295 for 500-pound barrels.

Cash Receipts Up

January-April cash receipts to dairymen were up about 12 percent from last year, due to greatly expanded marketings and higher farm milk prices. Cash receipts will continue to be sustantially above year-earlier levels for the remainder of 1980, and for the year may exceed $16-1/2 billion, up 12 percent from last year. Unless feed prices rise more than now expected, net income to dairymen for all of 1980 should approximate the relatively favorable situation of the past few years.

In 1979, larger marketings and strong gains in milk prices resulted in cash receipts from farm marketings of $14.7 billion, up 15-1/2 percent from 1978. Sales of whole milk to plants and dealers contributed about 98 percent of the total cash receipts, while almost all of the remainder came from direct sales to consumers. Receipts from farm-separated cream were negligible. All production regions posted increases in dairy receipts ranging from 11 percent in the Delta States to 18 percent for the Pacific States (Table 4).

Wholesale Prices Below Support

By mid-May, wholesale prices of butter, nonfat dry milk, and American cheese still had not reached the higher CCC purchase levels effective April 1. The large output of dairy products during the first part of the year along with sluggish sales resulted in large stock levels. Thus, a considerable amount of pre-April 1 output (not eligible for the higher Government purchase prices) was retained by manufacturers to service commercial demand while they sold post-April 1 output to the CCC. The lack of upward price movement in the wholesale markets, then, can probably be explained by manufacturers working off pre-April 1 accumulated dairy product stocks, for which there was weak demand. The high carrying charges of these inventories also provided downward pressure on wholesale prices. The current

Table 4--Cash receipts from farm marketings of milk and cream, United States by production regions, 1973-1979 1/

State and region	1973	1974	1975	1976	1977	1978	1979 2/
				Million dollars			
Maine	50.8	59.3	61.1	66.9	68.0	73.3	81.7
New Hampshire	27.3	30.8	32.0	35.6	36.1	39.2	43.5
Vermont	151.8	176.2	185.1	213.6	212.1	234.8	267.1
Massachusetts	50.6	58.0	59.9	65.9	65.9	67.4	73.4
Rhode Island	5.2	6.0	5.9	6.4	6.1	6.4	6.4
Connecticut	52.0	60.9	60.7	66.7	66.7	70.8	77.7
New York	704.0	811.9	859.6	987.4	981.2	1,075.6	1,249.6
New Jersey	45.7	49.4	48.8	56.6	56.4	59.0	61.9
Pennsylvania	525.7	620.5	662.2	779.6	808.8	877.7	1,030.8
Delaware	9.9	11.4	11.8	13.8	14.2	14.3	16.0
Maryland	113.9	133.6	140.7	157.3	161.6	171.7	188.9
NORTHEAST	1,736.9	2,018.0	2,127.8	2,449.8	2,477.1	2,690.2	3,097.0
Michigan	325.4	353.9	376.3	447.8	452.3	496.7	571.6
Wisconsin	1,201.3	1,394.4	1,500.5	1,810.4	1,890.4	2,127.6	2,519.1
Minnesota	570.5	666.7	675.3	785.1	817.0	880.3	1,026.5
LAKE STATES	2,097.2	2,415.0	2,552.1	3,043.3	3,159.7	3,504.6	4,117.2
Ohio	309.0	355.8	372.0	436.8	428.2	449.0	507.8
Indiana	163.1	186.5	188.1	217.3	222.8	229.9	264.7
Illinois	179.1	197.1	199.1	228.5	234.2	246.4	284.3
Iowa	262.2	290.2	304.2	345.0	353.5	386.7	440.1
Missouri	195.6	227.4	227.2	266.6	267.2	275.9	317.2
CORN BELT	1,109.0	1,257.0	1,290.6	1,494.2	1,505.9	1,587.9	1,814.1
North Dakota	57.3	62.7	62.9	75.5	77.1	81.6	91.0
South Dakota	97.4	111.9	111.9	138.2	141.9	150.6	174.8
Nebraska	95.6	106.7	109.3	123.4	118.3	125.9	149.0
Kansas	102.3	111.1	119.3	133.0	136.4	144.1	153.4
NORTHERN PLAINS	352.6	392.4	403.4	470.1	473.7	502.2	568.2
Virginia	125.7	151.9	162.3	187.3	191.4	205.4	234.3
West Virginia	23.7	28.3	29.3	33.8	31.5	35.3	41.8
North Carolina	118.9	139.1	149.4	161.9	166.8	171.9	192.4
Kentucky	149.2	178.8	184.3	212.9	217.9	219.8	248.9
Tennessee	141.2	162.6	168.8	193.8	203.5	214.7	245.3
APPALACHIAN	558.7	660.7	694.6	789.7	811.1	847.1	962.7
South Carolina	42.1	52.0	52.8	57.3	58.5	60.8	68.8
Georgia	96.0	116.5	115.4	135.2	134.3	148.0	166.7
Florida	172.1	211.4	222.8	240.2	242.9	247.3	282.1
Alabama	64.3	68.8	69.6	72.2	72.6	71.6	79.3
SOUTHEAST	374.5	448.7	460.6	504.9	508.3	527.7	596.9
Mississippi	70.9	79.9	80.6	86.2	85.7	91.3	101.3
Arkansas	49.2	58.6	58.7	68.3	69.8	76.6	86.2
Louisiana	85.9	102.8	106.4	117.3	114.5	120.3	132.6
DELTA STATES	206.0	241.3	245.7	271.8	270.0	288.2	320.1
Oklahoma	85.0	100.4	93.4	106.4	109.5	118.0	131.5
Texas	263.7	305.8	299.3	346.9	358.4	398.2	450.3
SOUTHERN PLAINS	348.7	406.2	392.7	453.3	467.9	516.2	581.8
Montana	19.1	22.6	22.2	23.7	27.1	30.2	31.6
Idaho	100.1	112.5	123.2	137.2	140.7	158.4	188.6
Wyoming	8.6	9.6	8.9	10.4	11.5	11.7	13.1
Colorado	65.5	76.1	75.4	85.6	86.7	96.3	106.7
New Mexico	27.7	33.5	37.1	44.4	47.0	52.7	65.4
Arizona	60.6	73.7	78.0	89.9	94.2	105.1	120.4
Utah	60.3	75.0	77.9	87.8	87.6	96.8	111.0
Nevada	9.8	14.0	14.5	17.7	18.9	19.0	22.3
MOUNTAIN	351.7	417.0	437.2	496.7	513.7	570.2	659.1
Washington	170.5	195.4	208.3	240.1	252.5	287.3	339.0
Oregon	72.6	84.8	88.6	101.0	103.6	114.6	133.3
California	693.0	894.3	997.3	1,089.1	1,182.5	1,227.6	1,451.0
PACIFIC	936.1	1,174.5	1,294.1	1,430.2	1,538.6	1,629.5	1,923.3
Alaska	2.1	2.4	2.7	2.7	2.8	2.5	2.2
Hawaii	16.5	19.4	20.5	21.9	23.2	23.7	24.9
UNITED STATES	8,090.0	9,453.6	9,922.5	11,428.6	11,751.7	12,689.9	14,667.6

1/ Totals may not add due to rounding.
2/ Preliminary.

substantial milk surplus may have limited any recent price gains in product markets.

In mid-May, Chicago Grade A wholesale butter prices stood at almost $1.37 per pound, or 3-1/2 cents under support, while nonfat dry milk (high heat, Central States area) was priced at about 2 cents under the new purchase price of $.895 per pound (figure 9). Wholesale prices of 40-pound blocks of American cheese (Wisconsin assembly points) showed the most strength, standing at about 1-1/2-cents below the new purchase price; 500-pound barrels of cheese were quoted at 3-3/4 cents under the CCC purchase price.

In mid-May, edible dry whey prices were quoted near 10 cents per pound (nonhygroscopic, Central States area), a decline of 1-1/4 cents from January as whey stocks moved from levels substantially below a year earlier to above year-ago levels. Edible grade casein prices were quoted at about $1.50 per pound in mid-May.

The April wholesale dairy product price index, as reported by the Bureau of Labor Statistics (BLS), stood at 227.8 (1967=100), up a tenth from a year ago and 4 percent from October. This is a reflection of the relative price stability in wholesale markets that has prevailed since October. This index will probably increase in the near future as wholesale markets adjust to the higher CCC purchase prices.

Wholesale dairy product prices likely will advance to near the new CCC purchase prices as pre-April 1 stocks are worked off. The heavy milk supply expected through at least early summer will limit any advances above CCC purchase prices, unless commercial use of dairy products starts to show some strength, in which case prices may move above support.

Retail Price Rises Slow

The relative stability in farm milk and wholesale dairy product prices since last fall was reflected by a slowing in year-to-year retail milk and dairy product price increases this winter. While dairy prices at the retail level were nearly 12 percent higher than a year earlier during November 1979, retail product prices in January-March were up an average 9.6 percent. This compares with an average year-to-year rise in all food prices of 7.8 percent during the first quarter of 1980. This winter, increases in retail prices of both fluid milk and cream products and manufactured products moderated (figure 10).

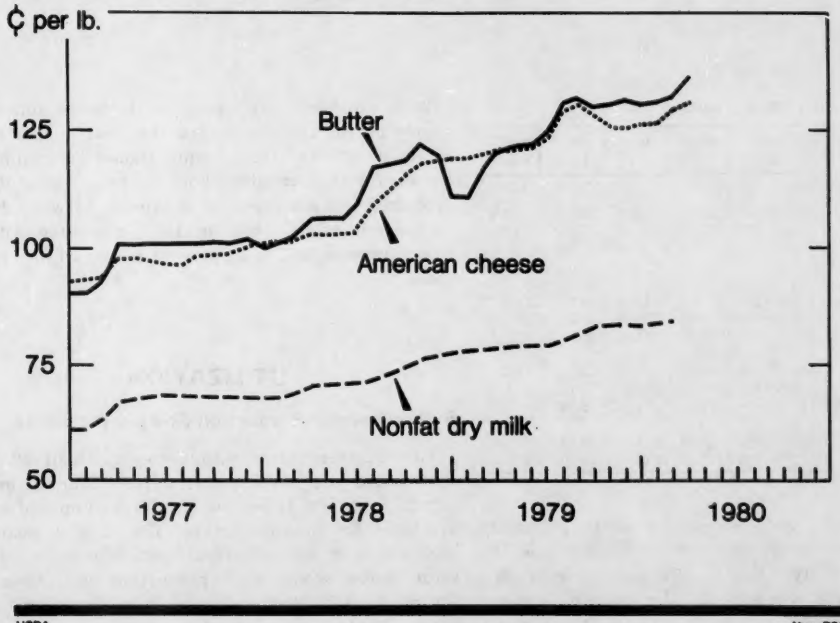

Figure 9

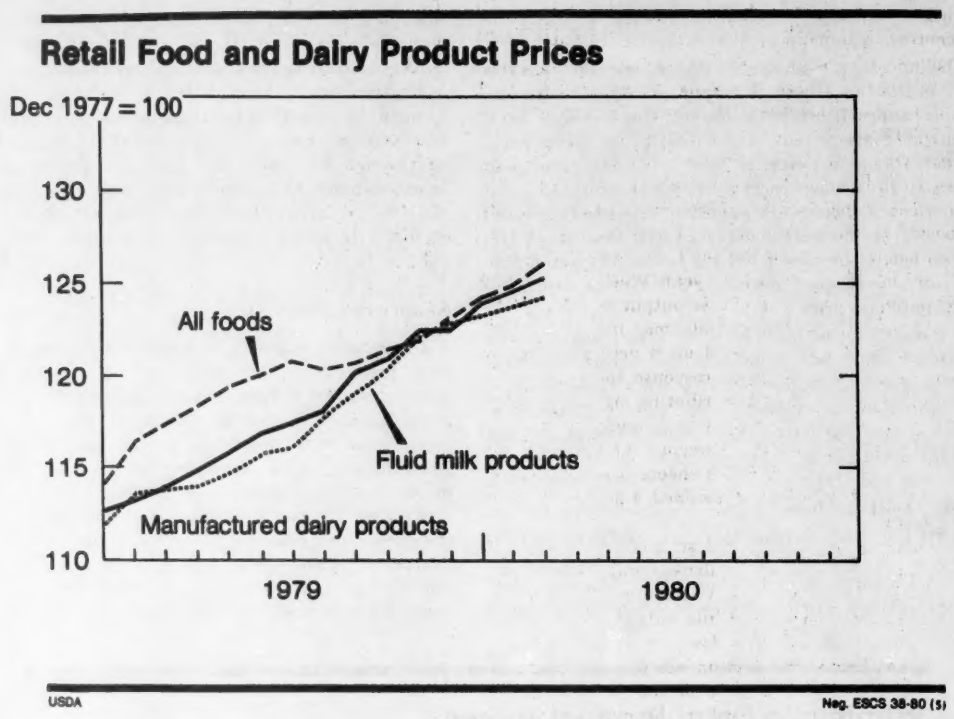

Figure 10

Retail dairy product prices

Item	Index base	Mar. 1979	June 1979	Dec. 1979	Mar. 1980
Consumer Price Index	1967=100	209.1	216.6	229.9	239.8
All food	1967=100	230.4	235.4	241.7	247.3
All dairy products	1967=100	201.5	205.5	216.9	220.3
Fluid milk and cream	12/77=100	113.8	115.7	122.7	124.1
Whole milk	1967=100	186.5	189.4	201.2	204.0
Other	12/77=100	113.6	115.6	122.0	122.7
Manufactured dairy products	12/77=100	114.0	116.8	122.5	125.1
Butter	1967=100	194.5	199.9	214.0	218.3
Cheese	12/77=100	114.6	116.9	122.6	124.9
Frozen desserts	12/77=100	113.4	116.9	122.6	125.1
Other	12/77=100	111.0	114.5	117.9	121.6

The farm-retail price spread for dairy products during January-March was a tenth higher than a year ago, or slightly larger than the increase in the farm value. This widening of the margin is consistent with the high rate of inflation in the economy, but considerably higher than pre-1979 increases.

With milk and dairy products to be in abundant supply during the coming months, year-to-year price increases at the grocery store should be similar to those of recent months. For the year, retail dairy product prices are expected to average between 9 and 11 percent higher than in 1979, compared with a likely increase of 7 to 11 percent in the all food price index.

UTILIZATION

Butter-Powder Production Sharply Increased

First-quarter butter output was up about 10 percent over a year earlier when adjusted for the extra day in February, reflecting the large supply of milk available for manufacturing. The largest year-to-year gains in butter output generally occurred in those States where milk production had increased the most, as California, Washington, New York and Pennsylvania all reported butter production increases ranging from a fourth to over a third. For

April, preliminary weekly data show output increased by 18 percent over a year ago. With large amounts of skim milk available from butter manufacture, nonfat dry milk output during the January-March increased by almost 30 percent from the 1979 level.

Year-to-year gains in American cheese production have slowed in recent months relative to the second half of 1979, as plants operated near capacity to handle the large milk supply. Even so, production increased 4 percent during the first 3 months of this year when adjusted for leap year. Weekly estimates suggest April American cheese output was 5 percent above a year earlier. Meanwhile, manufacture of other varieties of cheese posted an 8 percent increase during the first quarter in response to strong commercial sales. Varieties contributing significantly to the higher output were Cream and Neufchatel (up 16 percent), Mozzarella (11 percent), and Brick and Muenster (8 percent). Swiss cheese production during January-March period declined 3 percent from a year earlier.

Among other products, first quarter output of canned evaporated and condensed milk was about even with a year earlier. Dry whole milk production was up about 5 percent, while output of dry whey products (unmodified) was down by about the same percentage. Lactose production was up substantially.

During the first 3 months of the year, almost 6 percent more milk was used in the manufacture of dairy products than a year ago. A sharp decline in Wisconsin spot out-of-State shipments of milk from last year was indicative of the large supply of milk available.

With heavy milk supplies expected through late spring and early summer, butter-powder output should continue to be substantially above a year ago. The strength in commercial use of other-than-American cheeses suggests manufacture of such varieties could absorb a larger portion of the available milk supplies in coming months. On the other hand, with American cheese plants already operating at high levels, combined with sluggish sales, there may be proportionally less milk used in American cheese production.

Production of selected manufactured dairy products, 1979-80

Item	January-March		Change from year earlier	
	1979	1980[1]	1979	1980[1]
	Million pounds		*Percent*	
Butter	273.4	304.5	-9.2	+11.4
Cheese:				
American	525.1	553.1	+5.5	+5.3
Other	362.8	396.4	+4.4	+9.3
Cottage, creamed	214.4	207.8	-1.3	-3.1
Canned milk	177.8	180.0	+0.1	+1.2
Dry whole milk	21.0	22.2	+7.7	+5.7
Ice cream (Mil. gal.)	183.9	185.2	+1.9	+0.7
Milk equivalent[2]	16,044	17,175	-2.1	+7.0
Nonfat dry milk	186.1	240.9	-19.1	+29.4

[1] Preliminary. [2] Total all reported manufactured products.

Wisconsin out-of-state milk shipments

Month	1978		1979	
	Loads	Volume	Loads	Volume
	Number	*Thousand pounds*	*Number*	*Thousand pounds*
January	302	14,194	156	7,332
February	180	8,460	70	3,290
March	64	3,008	20	940
April	17	799	0	0
May	24	1,128		
June	6	282		
July	36	1,692		
August	157	7,379		
September	294	13,818		
October	175	8,225		
November	232	10,904		
December	251	11,797		
Total	1,738	81,686		

More Milk Used in Manufactured Products in 1979

Last year's relatively large milk production resulted in larger supplies of milk available for manufacturing. A record 67.4 billion pounds (milk equivalent, fat solids basis) were utilized in manufactured dairy products, up 2.2 percent from 1978 and about 1/2 percent more than the previous high of 67.1 billion pounds used in 1977.

Increased output of American and other varieties of cheese more than accounted for the larger milk supplies used in manufacturing, utilizing about 1.7 billion pounds more than in 1978 (table 5). This continued the trend toward more milk used in cheese production.

Butter-powder production (exclusive of butter produced from whey cream) absorbed about 0.3 billion pounds less last year than in 1978, a decline of about 1-1/2 percent. While butter used about 16 percent of the marketed milkfat supply, nonfat dry milk used less than a tenth of the supply of milk solids-not-fat.

The amount of milk used in production of dry whole milk increased significantly during 1979, while that used in frozen desserts and condensed and evaporated milk was up less sharply. Milk utilized in cottage cheese output was down last year.

Fluid milk and cream sales (milk equivalent, fat solids basis) accounted for 42 1/2 percent of the market supply in 1979, compared with 43 percent in 1978.

Table 5 --Use of market supply of milk, United States, 1964-79

Year	Fluid use	Butter 1/	Cheese		Creamed cottage cheese	Evaporated and condensed milk 2/	Dry whole milk	Frozen dairy products, net	Other factory products	Total factory products 3/	Miscellaneous 4/	Market supply of milk 5/
			American	Other								
	Billion pounds (milk equivalent)											
1964	54.9	31.2	11.5	4.2	1.0	5.0	0.6	10.3	0.6	64.5	1.1	120.5
1965	55.4	28.5	11.5	4.3	1.0	4.6	.7	10.6	.6	61.8	1.2	118.4
1966	55.4	23.7	12.2	4.5	1.0	4.7	.7	10.5	.6	57.9	2.5	115.9
1967	54.0	26.1	12.7	4.5	1.0	4.0	.5	10.5	.3	59.8	1.2	114.9
1968	53.7	24.9	12.7	4.7	1.1	3.9	.6	11.0	.4	59.2	-.2	112.8
1969	52.8	23.7	12.7	4.9	1.2	3.9	.5	11.0	.4	58.3	1.0	112.1
1970	52.0	23.9	14.2	5.3	1.3	3.3	.5	11.0	.5	60.0	1.5	113.5
1971	51.9	23.9	15.1	5.8	1.3	3.2	.5	11.0	.7	61.6	1.5	115.0
1972	53.2	22.7	16.4	6.4	1.3	3.1	.6	11.0	.8	62.3	1.1	116.7
1973	52.4	18.6	16.8	6.8	1.1	2.9	.6	11.1	.7	58.7	1.9	113.0
1974	50.5	19.3	18.6	7.1	1.0	2.8	.5	11.2	.8	61.3	.7	112.5
1975	51.1	19.9	16.5	7.4	1.0	2.7	.5	11.9	.7	60.5	.8	112.4
1976	51.5	19.4	20.6	8.2	1.0	2.5	.6	11.6	.7	64.7	1.4	117.6
1977	51.4	21.9	20.5	8.4	1.1	2.4	.5	11.7	.7	67.1	1.6	120.1
1978	51.2	19.7	20.7	9.2	1.1	2.3	.5	11.7	.7	65.9	2.0	119.2
1979 6/	51.4	19.4	21.8	9.7	1.0	2.3	.6	11.7	.7	67.4	2.6	121.4
	Percentage of total market supply											
	Percent											
1964	45.6	25.9	9.5	3.5	.8	4.2	.5	8.5	.5	53.5	.9	100.0
1965	46.8	24.1	9.7	3.6	.8	3.9	.6	9.0	.5	52.2	1.0	100.0
1966	47.8	20.4	10.5	3.9	.9	4.1	.6	9.1	.5	50.0	2.2	100.0
1967	47.0	22.7	11.1	3.9	.9	3.5	.4	9.1	.3	52.0	1.0	100.0
1968	47.6	22.1	11.3	4.2	1.0	3.5	.5	9.8	.4	52.5	-.2	100.0
1969	47.1	21.1	11.3	4.4	1.1	3.5	.4	9.8	.4	52.0	.9	100.0
1970	45.8	21.1	12.5	4.7	1.1	2.9	.4	9.7	.4	52.9	1.3	100.0
1971	45.1	20.8	13.1	5.0	1.1	2.8	.4	9.6	.6	53.6	1.3	100.0
1972	45.6	19.5	14.1	5.5	1.1	2.7	.5	9.4	.7	53.4	.9	100.0
1973	46.4	16.5	14.9	6.0	1.0	2.6	.5	9.8	.6	51.9	1.7	100.0
1974	44.9	17.2	16.5	6.3	.9	2.5	.4	10.0	.7	54.5	.6	100.0
1975	45.5	17.7	14.7	6.6	.9	2.4	.4	10.6	.6	53.8	.7	100.0
1976	43.8	16.5	17.5	7.0	.9	2.1	.5	9.9	.6	55.0	1.2	100.0
1977	42.8	18.2	17.1	7.0	.9	2.0	.4	9.7	.6	55.9	1.3	100.0
1978	43.0	16.5	17.4	7.7	.9	1.9	.4	9.8	.6	55.3	1.7	100.0
1979 6/	42.3	16.0	18.0	8.0	.8	1.9	.5	9.6	.6	55.5	2.1	100.0

1/ Excludes milk equivalent of whey cream, includes milk equivalent of residual cream from fluid and other uses.
2/ Canned and bulk.
3/ May not add due to rounding.
4/ Minor miscellaneous uses and any inaccuracies of independently determined use items.
5/ Milk marketed by farmers, net imports of ingredients such as frozen cream, butterfat-sugar mixtures and "ice cream", and net change in storage cream.
6/ Preliminary.

Commercial Use Weakens

Commercial disappearance of dairy products during the first quarter on a daily average basis decreased slightly (by 0.2 percent milk equivalent basis) from a year ago (table 6). The very favorable retail meat prices of recent months contributed to the weakening in dairy product sales. The retail prices of all meats averaged 3 percent higher than a year ago in the first three months, considerably lower than the increase in dairy product prices. Pork and poultry prices were well below year-earlier levels. In addition, a fairly strong gain in dairy product commercial use during January-March 1979 probably limited gains in this year's dairy sales.

January-March dairy product sales were buoyed by a brisk commercial movement of other-than-American varieties of cheese (table 7). When adjusted for leap year, first quarter commercial use of these varieties increased 4.6 percent from last year, reflecting the longtime trend of growing tastes and preferences for cheese types other-than-American. On the other hand, sales of American cheese posted a rather marked year-to-year decline of 3.1 percent to offset the sales gains in other varieties. This decrease can probably be attributed to a substitution of relatively low priced meats for cheddar, colby, and processed American cheeses, and also, to a decline in real disposable per capita income.

Commercial disappearance of butter was about the same as last year's relatively high level during the first quarter (when adjusting for the extra day in February). Sales may have been better than otherwise expected as butter printers and other wholesale purchasers probably purchased substantial quantities of butter during March in anticipation of higher support purchase prices effective April 1.

Changes in January-March dairy sales from year earlier

Item	Change
	Percent
Total milk[1]	-0.2
Manufactured products:	
American cheese	-3.1
Other cheese	+4.6
Cottage cheese[2]	-1.6
Butter	-0.1
Ice cream	-0.4
Ice milk	-0.8
Canned milk	-9.8
Nonfat dry milk	-8.0
Fluid products	-1.1
Whole milk	-4.5
Skim and lowfat milk	+4.0
Cream and mixtures	[3]+3.2

[1] On a milk equivalent, fat-solids basis. [2] Creamed and low-fat. [3] January-February.

Commercial disappearance of nonfat dry milk was decidedly sluggish during January-March, down 8 percent from last year. However, powder manufacturers may have accumulated stocks during March to service accounts after April 1 while selling post-April 1 production to the Government under the price support program. While sales have been generally declining over the years, the recent decline may have been exacerbated by high interest rates that limited the incentive for users to build inventories beyond their immediate needs.

Fluid milk sales during the first 3 months of the year declined slightly more than 1 percent from year-earlier levels when adjusted for calendar composition. Among soft manufactured dairy products, lowfat cottage cheese sales were signficantly above a year ago during the first quarter, while creamed cottage cheese sales were down; ice cream sales were even with last year.

Gains, if any, in commercial use over the next few months could be limited. Currently, retail prices of red meats, poultry, and eggs are below or only slightly above a year ago, and any year-to-year increases in late spring and early summer should be less than dairy product price rises. Also, further declines in real consumer income are probable in the coming months. On the other hand, the relatively large expected increases in retail prices of other nonalcoholic beverages may bolster fluid milk sales in the near future.

Per Capita Use Expected To Be Steady

Per capita consumption of all dairy products during 1980 (on a fat solids, milk equivalent basis) will probably vary little from 1979. With substantially higher purchases by the Government under the price support program, CCC donations may increase to offset any possible decreases in per capita dairy product sales.

Per person use of cheese will probably rise less than increases of recent years, given the relative price advantages of meats and eggs this year. Butter consumption has been stable in the recent past, and likely will be this year. A decrease in per person consumption of whole milk may be offset by an increase in use of lowfat milks; on a milk equivalent, fat solids basis, fluid milk sales probably will continue to decline.

Civilian per capita consumption of milk and dairy products totaled 561 pounds during 1979, an increase of about 5-1/2 pounds from a year earlier. Both increased commercial use and larger USDA donations contributed to the gain. Last year, the average American consumed 20.6 pounds of milkfat, 1 percent more than in 1978 (table 9). Larger per capita consumption of butter and cheese offset decreased milkfat use in fluid products (table 8). Per person

Table 6--Commercial disappearance: Total milk, annual and by quarters, 1978-80 1/

Item	1978	1979					1980 2/				
		By quarters				Annual	By quarters				Annual
		1st	2nd	3rd	4th		1st	2nd	3rd	4th	
		Billion pounds									
Production	121.6	29.8	32.8	31.2	29.8	123.6	31.1				
Farm use	2.7	.6	.6	.6	.6	2.5	.6				
Marketings	119.0	29.2	32.2	30.6	29.2	121.1	30.5				
Beginning commercial stocks	4.9	4.5	4.9	6.4	6.6	4.5	5.4				
Imports	2.3	.4	.5	.6	.9	2.3	.4				
Total supply	126.2	34.1	37.6	37.6	36.7	127.9	36.3				
Ending commercial stocks	4.5	4.9	6.4	6.6	5.4	5.4	5.6				
Net removals	2.7	.2	1.1	4/	.8	2.1	1.5				
Commercial disappearance Actual	118.9	28.9	30.2	30.8	30.4	120.4	29.2				
Percent change 3/	+2.4	+2.1	+ .8	+ .6	+1.4	+1.2	5/-0.2				

1/ Milk equivalent, fat solids basis. Totals may not add due to rounding.
2/ Preliminary.
3/ From year earlier using unrounded data.
4/ Less than 50,000 pounds.
5/ On a daily average basis.

Table 7 --Commercial disappearance: Selected dairy products, United States, annual 1970-79, quarters, 1979-80

Year and quarter	Butter 1/	Cheese		Nonfat dry milk	Canned Milk	Frozen products 3/
		American 2/	Other			
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. gal.
1970	898.2	1,398.0	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	855.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,276.5	809.9	999.5	1,128.0
1975	951.0	1,717.1	1,331.9	697.0	923.9	1,183.9
1976	919.0	1,920.9	1,458.0	719.2	899.0	1,154.0
1977	859.8	1,958.8	1,512.3	682.2	799.2	1,167.6
1978	903.5	2,064.7	1,655.1	658.4	776.1	1,170.4
1979	895.8	2,110.5	1,725.5	601.7	765.4	1,157.6
1979 - 1st	246.7	517.6	382.6	171.6	194.4	250.5
2nd	204.1	542.3	427.2	111.7	160.7	325.0
3rd	206.0	513.4	439.9	195.0	184.4	342.3
4th	239.1	536.6	476.1	123.3	225.9	239.8
1980 - 1st	249.9	507.6	404.4	160.6	177.4	251.3
2nd						
3rd						
4th						
	1979-80 percent change					
1st 4/	-.1	-3.1	+4.6	-8.0	-9.8	-.8
2nd						
3rd						
4th						

1/ Imports include butter equivalent of butteroil. 2/ Imports include Colby cheese; stocks do not include processed cheese. 3/ Excludes Mellorine. 4/ On a daily average basis.

Table 8--Dairy products: Per capita civilian consumption, selected products, United States, 1955 and 1960-79

Year	Butter	Cheese		Cottage cheese	Evaporated and condensed milk	Dry whole milk	Ice cream	Nonfat dry milk	Fluid products 1/
		American	Other						
					Pounds				
1955	9.0	5.4	2.5	3.9	16.2	0.3	18.0	5.5	348
1960	7.5	5.4	2.9	4.8	13.7	.3	18.3	6.2	322
1961	7.4	5.7	2.9	4.6	13.3	.3	18.0	6.2	312
1962	7.3	6.1	3.1	4.6	12.5	.3	17.9	6.1	308
1963	6.9	6.1	3.1	4.6	11.6	.3	18.0	5.8	307
1964	6.9	6.2	3.2	4.7	11.4	.3	18.3	5.9	304
1965	6.4	6.2	3.4	4.7	10.7	.3	18.5	5.6	302
1966	5.7	6.2	3.6	4.6	9.7	.3	18.2	5.9	297
1967	5.5	6.4	3.7	4.5	9.0	.3	17.8	5.6	285
1968	5.7	6.6	4.0	4.6	8.9	.2	18.4	5.8	280
1969	5.4	6.7	4.2	4.8	7.9	.2	18.0	5.8	272
1970	5.3	7.1	4.4	5.2	7.1	.2	17.7	5.4	264
1971	5.1	7.4	4.7	5.4	6.8	.2	17.5	5.3	260
1972	4.9	7.8	5.4	5.4	6.3	.1	17.4	4.6	263
1973	4.8	8.0	5.7	5.2	6.0	.1	17.5	5.3	257
1974	4.6	8.6	6.0	4.7	5.6	.1	17.5	4.2	246
1975	4.8	8.3	6.2	4.8	5.3	.1	18.7	3.3	246
1976	4.4	9.1	6.8	4.8	5.0	.2	18.1	3.6	246
1977	4.4	9.4	6.9	4.8	4.4	.2	17.8	3.4	243
1978	4.5	9.7	7.5	4.8	4.1	.3	17.7	3.2	239
1979 2/	4.6	9.8	7.8	4.7	4.3	.3	17.6	3.3	237

1/ Milk equivalent (fat solids basis) of whole milk, cream items, lowfat and skim items.
2/ Preliminary.

Table 9 --Milk solids in all dairy products: Production and disposition, 1965-79

Year	Production 1/	Sold by farmers	Civilian disposition					
			Consumed on farms where produced 2/	National School Lunch and Special Milk Programs	USDA donations 3/	Other	Total	Per capita
	Million pounds							Pounds
	Milkfat							
1965	4,592	4,371	145	113	132	3,990	4,380	22.9
1966	4,426	4,250	129	117	43	4,014	4,303	22.3
1967	4,377	4,189	116	117	114	3,826	4,173	21.4
1968	4,305	4,129	104	117	151	3,805	4,177	21.2
1969	4,264	4,104	94	119	169	3,778	4,160	20.9
1970	4,284	4,137	80	113	157	3,800	4,150	20.6
1971	4,344	4,207	77	113	169	3,815	4,174	20.4
1972	4,410	4,280	70	111	149	3,923	4,253	20.6
1973	4,225	4,102	65	109	136	3,925	4,235	20.4
1974	4,238	4,121	60	108	54	3,963	4,185	20.0
1975	4,238	4,125	55	107	84	3,993	4,239	20.1
1976	4,406	4,297	51	105	17	4,108	4,282	20.1
1977	4,483	4,379	47	104	109	4,055	4,315	20.1
1978	4,462	4,364	43	103	85	4,185	4,416	20.4
1979 4/	4,523	4,432	38	99	88	4,269	4,494	20.6
	Milk solids-not-fat							
1965	10,704	9,905	337	275	166	6,997	7,775	40.6
1966	10,324	9,621	301	283	124	7,082	7,790	40.3
1967	10,223	9,594	271	285	130	7,024	7,710	39.5
1968	10,081	9,528	244	288	144	7,145	7,821	39.7
1969	9,985	9,490	221	293	152	7,198	7,864	39.5
1970	10,063	9,626	189	298	153	7,380	8,020	39.8
1971	10,197	9,797	182	300	167	7,486	8,135	39.8
1972	10,334	9,967	165	302	133	7,573	8,173	39.6
1973	9,932	9,592	152	301	69	7,764	8,286	39.8
1974	9,940	9,633	142	301	62	7,505	8,010	38.2
1975	9,930	9,642	130	301	62	7,531	8,024	38.0
1976	10,343	10,070	121	301	32	7,792	8,245	38.7
1977	10,540	10,282	111	301	71	7,743	8,226	38.3
1978	10,458	10,220	101	301	73	7,762	8,237	38.0
1979 4/	10,632	10,411	90	301	65	7,940	8,396	38.4

1/ Quantities produced and used, estimated by applying the percentage of milkfat and solids-not-fat in each product to the amount of products. 2/ Fluid milk and cream and farm-churned butter. 3/ Butter, cheese, evaporated milk, nonfat dry milk, and dry whole milk. 4/ Preliminary.

use of milk solids-not-fat was 38.4 pounds during 1979, also up 1 percent from a year earlier.

Commercial Stocks Remain Ample

Commercial holdings of dairy products remained well above year-earlier levels on April 1 as milk production continued to outpace commercial use. April 1 stocks of milkfat were 14-1/2 percent above last year on that date, while commercial stocks of solids-not-fat were a fourth more than a year ago.

Commercial stores of butter were a fifth above a year ago on April 1, after being two-thirds above last year's relatively low levels on January 1. Nonfat dry milk commercial stocks stood 60 percent above a year ago on April 1. Although still a high level relative to a year ago, February 1 powder stocks were more than 2 times above the small year-earlier holdings.

Like butter and nonfat dry milk, cheese stocks relative to last year have come down in recent months. American cheese commercial holdings on April 1 were 7-1/2 percent more than last year, compared with 16 percent higher on January 1. Commercial supplies of other cheese varieties were nearly a third larger than last year at the beginning of April, but some of the increase can probably be attributed to larger pipeline holdings to meet expanded commercial use.

Dairy product stocks

Item	Apr. 1, 1978	Apr. 1, 1979	Apr. 1, 1980
	Million pounds		
Commercial:			
Butter	56.7	32.1	38.8
American cheese	333.4	359.7	386.8
Other cheese	65.3	85.6	112.1
Nonfat dry milk	49.8	50.5	81.4
Milkfat	179.2	173.5	198.5
Solids-not-fat	183.0	195.9	247.6
Milk equivalent	5,064	4,935	5,590
Government:			
Butter	179.0	177.9	170.8
American cheese	40.9	8.1	7.3
Nonfat dry milk	612.3	472.8	361.6
Milkfat	157.3	145.8	139.8
Solids-not-fat	601.6	457.3	350.0
Milk equivalent	4,102	3,754	3,601

Commercial stocks of other products were considerably larger than a year earlier on April 1. Canned milk and dry whole milk holdings were a half and two-fifths larger than a year ago, respectively. Dry whey product stocks were up nearly a tenth.

Some seasonal buildup of stock levels can be expected during the spring flush production period. However, the relative amount that commercial holdings exceed last year's levels possibly could lessen due to substantial amounts of butter, cheese, and nonfat dry milk moving to the CCC in response to wholesale prices below the support purchase levels. In fact, it is likely commercial stocks will fall below year-earlier levels in the near future because of sharply higher carrying costs of stocks due to high interest rates, and because of a large buildup of dairy product holdings during May-July 1979.

Government Purchases Large

April purchases by the CCC totaled 1.3 billion pounds milk equivalent, the largest amount purchased in any one month since June 1971. The substantial quantities removed from the market during April were expected in light of the milk production situation and the increase in CCC dairy product purchase prices on April 1. Many cheesemakers and butter-powder operations probably held pre-April 1 production for their own inventories and sold post-April 1 output to the CCC, whose purchase prices were generally above wholesale market prices. Also, as a result of the large April purchases, total 1980 removals through April were nearly a third larger than the removals for the entire year of 1979.

With respect to the individual products, deliveries of butter to the CCC during January-April were 92.8 million pounds, or 3-3/4 times greater than during 1979 for the same period. April butter purchases alone totaled nearly 52 million pounds. January-April purchases of nonfat dry milk were 152.8 million pounds, nearly six times larger than a year ago, with the bulk of the purchases occurring during April. Cheese manufacturers cleared 86.3 million pounds of American cheese to the government during the first 4 months of the year; last year the CCC sold cheese back to the industry over the same period.

Government removals of dairy products for the May-June flush production period will be seasonally higher and also substantially above year-earlier levels due to the large year-to-year gains in milk production, weak demand, and depressed market prices. However, offerings to the CCC may taper as dairy product manufacturers work off their stocks accumulated before April 1 and replenish inventories. For the second half of the year, Government purchases

USDA dairy purchases

Item	January-April		
	1979	1980	Change
	Million pounds		*Percent*
Butter	24.8	92.8	+274.2
American cheese	-.3	86.3	*
Nonfat dry milk	26.3	152.8	+481.0
Evaporated milk	6.2	4.8	-22.6
Milk equivalent	522	2,780	+432.6

*More than 1,000.

could remain heavy if milk production continues to exceed year-earlier levels and if there's little or no gain in dairy product sales. On the other hand, if milk output drops back to last year's levels and commercial use is more buoyant, CCC removals could subside.

CCC uncommitted inventories of butter on May 1 were up a quarter from a year ago at 206 million pounds. Government holdings of nonfat dry milk stood at 413 million pounds, down 6-1/2 percent from last year. May 1 CCC uncommitted stocks of cheese totaled 56 million pounds, while there were no cheese holdings a year earlier.

Uncommitted CCC stocks

Item	April 30	
	1979	1980
	Million pounds	
Butter	163.3	206.0
American cheese	—	56.1
Nonfat dry milk	442.0	413.4

*Less than 50,000 pounds.

FOREIGN DAIRY TRADE AND TRENDS

Cheese Imports Down

Total U.S. cheese imports were down substantially during January-March, as imports of cheese varieties subject to quota declined nearly a third from a year ago (table 10). It is important to note that in making the comparison with last year, 1979 quota import totals include Swiss and other varieties of cheese which were not subject to quota, provided they were priced above the pricebreak (7 cents per pound above the CCC American cheese purchase price). The large decline was in part due to the heavy imports that entered during December in anticipation of the new import quota system. Also, delays in issuing new quota licenses to importers for 1980 probably limited deliveries of foreign cheese into the United States.

Among cheeses subject to quota, imports of American cheese were only 14 percent of year-ago offerings, while 'Other" quota types were down by about two-thirds. On the other hand, imports of Swiss cheese were a tenth larger than a year ago during January-March.

Imports of cheese not subject to quota during the first 3 months were 2-3/4 times larger than in 1979. Although imports of both Roquefort (sheep milk cheese) and Pecorino (goat's milk cheese) were up, the nonquota cheese total is substantially distorted by imports of other cow's milk cheeses, primarily soft ripened such as Brie and Camembert, for which there is no comparable total for 1979 (due to changes in the Tariff Schedules).

U.S. dairy trade
(milk equivalent)

Year and quarters	Imports		Exports	Shipments[1]
	Cheese	Other		
	Million pounds			
1979				
1st	251	133	98	150
2nd	432	44	90	167
3rd	517	34	74	143
4th	829	65	100	160
Year[2]	2,028	276	362	620
1980				
1st	224	142	108	[3]89

[1] To U.S. territories. [2] May not add due to rounding. [3] January-February.

Imports of most other dairy products subject to quota were above year-earlier levels during the first quarter of the year. January-March imports of butterfat mixtures, nonfat dry milk, chocolate crumb and animal feed with milk solids posted the largest year-to-year gains. The total annual quota for butteroil was filled in January, while the quota for nonfat dry milk imports was more than 90 percent filled by the end of March.

Among the nonquota dairy products, casein imports during January-March were 12 percent above a year ago, while imports of lactose were 280 percent greater than last year.

On a milk equivalent, fat solids basis, imports of dairy products during the first 3 months of 1980 were 5 percent less than a year ago. The reduced cheese imports nearly offset larger imports of other dairy products.

With importers now receiving their licenses from the government, cheese imports may increase this spring relative to a year ago as importers rebuild stocks. On the other hand, high interest rates may reduce the incentive for building inventories. The relatively unfavorable outlook for general economic conditions might also temper demand for imported cheese.

Commercial exports of dairy products by the United States (which is not a major exporter) during January-March were about 10 percent larger than last year on a milk equivalent basis. Nonfat dry milk, lactose, and cheese exports posted substantial year-to-year gains, while exports of infant and dietetic foods and corn-soya-milk mixture were down considerably. Food-aid exports of nonfat dry milk were four-fifths greater than a year earlier during January-March, while foreign donations of corn-soya-milk were down about a third.

Table 10--Dairy Products: U.S. imports, quota and non-quota, total 1978, and January-March, 1979-80 1/

Product	Calendar year quota	1979 imports	March			Cumulative, January-March		
			1979	1980	1980 as a % of 1979	1979	1980	1980 as a % of 1979
	Thousand pounds				Percent	Thousand pounds		Percent
Cheese, quota types								
American-Cheddar	12,205.3	10,257	463	77	17	2,342	336	14
-Other	7,545.4	7,707	608	57	9	938	119	13
Italian-Original loaves	12,374.4	6,695	759	587	77	1,741	1,329	76
-Other	1,550.0	997	130	46	35	332	216	65
Edam and Gouda-Natural	9,208.6	8,559	304	453	149	563	1,059	188
-Processed	3,151.3	1,283	8	22	275	10	100	1,000
Blue Mold	5,469.6	4,335	126	283	225	293	505	172
Swiss-Emmenthaler 2/	70,228.1	75,329	3,786	2,625	69	9,055	8,516	94
-Gruyere process 2/	15,597.2	18,642	565	604	107	1,275	2,883	226
Other-Over 0.5 % fat 3/	90,192.1	88,626	2,938	1,762	60	10,418	3,581	34
-Under 0.5 % fat 3/	12,621.1	4,869	39	46	118	42	46	110
Total	240,143.1	227,299	9,726	6,562	67	27,009	18,689	69
Cheese, non-quota types								
Other cow's milk cheeses 4/		---	---	759	---	---	3,411	---
Miscellaneous 5/		1,261	52	83	160	186	151	81
Pecorino		18,400	1,020	1,594	156	2,732	4,436	162
Roquefort		1,328	35	159	454	111	363	327
Total		20,989	1,107	2,596	235	3,029	8,361	276
Total cheese, Quota and Non-quota	240,143.1	248,288	10,832	9,158	85	30,038	27,050	90
Other quota products								
Butter	707.0	6/ 809	82	13	16	141	26	18
Butteroil	1,200.0	1,200	---	---	---	1,200	1,200	100
Butterfat mixtures	2,580.0	2,545	296	114	39	335	568	170
Ice cream	3,377.3	2,497	---	374	---	1,911	1,150	60
Frozen cream	12,540.0	12,315	2,334	701	30	6,369	7,268	114
Nonfat dry milk	1,807.0	6/ 2,178	102	111	109	973	1,689	174
Dried buttermilk and whey	496.0	317	---	---	---	---	179	*
Evaporated milk	1,312.0	1	---	---	---	---	1	*
Condensed milk	4,079.0	383	8	1	13	156	176	113
Chocolate crumb-Regular	21,409.0	10,059	1,185	1,093	92	2,576	3,491	136
-Lowfat	4,680.0	1,941	194	40	21	219	48	22
Animal feed with milk solids	16,300.0	15,695	137	1,125	821	1,709	4,106	240
Non-quota products								
Casein		150,827	8,868	10,903	123	36,478	40,755	112
Lactose		1,983	102	11	11	240	919	383
Milk equivalent, fat solids basis, total all products		2,298,610	127,127	89,986	71	383,998	366,244	95

1/ Preliminary. 2/ 1979 imports include Swiss-types which were not subject to quota prior to January 1, 1980. 3/ 1979 imports include cheeses which prior to January 1, 1980 were not subject to quota. 4/ Primarily soft, ripened cheeses. No applicable comparison to prior year. 5/ Gjetost, Bryndza, Gammelost and Noekkelost, and Goya. 6/ Probable error in reported data. * More than 1,000.

Table 11—Imports, exports, and shipments of dairy products, 1965-79[1]

Year	Imports		Exports		Shipments[2]	
	Quantity	Percent of production	Quantity	Percent of production	Quantity	Percent of production
	Million pounds	*Percent*	*Million pounds*	*Percent*	*Million pounds*	*Percent*
1965	923	.7	1,836	1.5	522	.4
1966	2,791	2.3	778	.6	430	.4
1967	2,908	2.4	363	.3	461	.4
1968	1,780	1.5	1,185	1.0	586	.5
1969	1,621	1.4	921	.8	498	.4
1970	1,878	1.6	438	.4	548	.5
1971	1,356	1.1	2,458	2.1	568	.5
1972	1,694	1.4	1,469	1.2	677	.6
1973	3,859	3.3	654	.6	638	.6
1974	2,923	2.5	582	.5	576	.5
1975	1,669	1.4	550	.5	496	.4
1976	1,943	1.6	502	.4	520	.4
1977	1,968	1.6	459	.4	527	.4
1978	2,310	1.9	368	.3	602	.5
1979[3]	2,305	1.9	362	.3	620	.5

[1] Milk equivalent, fat solids basis. [2] To U.S. territories. [3] Preliminary.

World Milk Production Varies

Early 1980 milk producton around the world presented a mixed picture. In the European Community (EC), production continued to increase at rates similar to 1979, as favorable winter weather contributed to the output gain. Canadian milk production increased sharply, partially in response to strong domestic demand for dairy products, while New Zealand's summer milk production was near year-earlier levels as pastures recovered from a cool spring. On the other hand, Australian milk output was down, due to a decline in cow numbers. In the Soviet Union, the world's largest milk producing nation, first quarter milk production was down 5 percent from last year, even though cow numbers were larger. This sharp dropoff is apparently due to reduced quantity and poor quality of the 1979 feed grain crop, inadequate roughage supplies, and the suspension of sales of feedstuffs by the United States to the Soviet Union. Milk production has also leveled off in Eastern European countries.

Manufacture of cheese utilized greater amounts of milk early this year, as cheese output in both the EC and Canada was up substantially. Both domestic demand and imports of cheese by richer developing nations helped spur the increase. Cumulative cheese production in both New Zealand and Australia for their respective dairying years was at or near year-earlier levels.

Butter production during the first part of 1980 was generally near year-earlier levels in the EC and Canada. Reflecting changes in their export markets, butter production continued to decline substantially in Oceania. Meanwhile, the dropoff in milk production (and hence butter production) in the centrally planned economies of Europe has resulted in a buoyant butter trade for the EC, New Zealand, and other dairy exporting countries.

Output of nonfat dry milk was down in the EC, Oceania, and Canada during early 1980. Combined with large powder exports, the lower nonfat dry milk output has resulted in EC intervention stocks being only about a third of year-earlier levels in recent months.

For all of 1980, EC milk production is expected to increase about 1 percent over a year ago, or less than half the rate of growth that occurred last year. It now appears that the target price for milk will be increased 4 percent from last year's level, while the coresponsibility levy (producer tax on milk delivered to processors) will be increased to 2 percent from the previous level of 0.5 percent. The increase in the levy is an attempt to reduce the chronic surpluses in the EC.

The increase in dairy product sales in Canada suggests milk output in that country may increase substantially during 1980. Non-EC West Europe nations are also forecast to have larger milk production. In Oceania, Australian milk output during the 1979/80 dairy year will be down, continuing a long-term trend, while New Zealand's production may be near last year's level after production rebounded following a slow start.

How the current feed situation will impact on Soviet milk production later this year is uncertain, but growing conditions for crops this spring and summer will have a major effect. For the year,

though, a decrease in milk production is virtually ensured because of the performance during early 1980.

The brisk international trade in dairy products that has characterized the latter part of 1979 and early 1980 may subside during the rest of the year. The relatively high international prices of butter and nonfat dry milk may temper demand for dairy products among developing countries. Also, a return to more normal milk production levels in the Soviet Union would likely decrease dairy product movement from exporting nations.

Table 12.--U.S. Dairy Situation at a Glance

Item	Unit or base period	1978	1979					1980		
		Apr.	Feb.	Mar.	Apr.	May	Year	Feb.	Mar.	Apr.
Production and cow numbers:										
Total milk	Mil. lb.	10,614	9,317	10,526	10,600	11,226	123,623	9,917	10,881	10,941
Milk per cow	Lb.	979	862	977	985	1,044	11,471	920	1,009	1,015
Number of milk cows	Thou.	10,840	10,804	10,773	10,757	10,750	10,777	10,781	10,783	10,780
Prices received by farmers:										
All milk, sold to plants, 100 pounds	Dol.	10.10	11.90	11.80	11.60	11.50	12.00	12.80	12.70	12.70
Percentage of parity 1/	Pct.	74	75	74	74	74	74	71	71	73
Manufacturing grade milk, 100 pounds	Dol.	9.30	10.80	10.80	10.70	10.80	11.10	11.70	11.80	11.90
Parity equivalent	Dol.	11.98	13.57	13.83	14.01	14.09	14.11	15.49	15.66	15.66
Fat content	Pct.	3.65	3.78	3.72	3.67	3.62	3.69	3.75	3.72	3.67
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol.	9.24	10.52	10.59	10.63	10.67	10.91	11.35	11.59	11.68
Milk eligible for fluid market, 100 pounds	Dol.	10.30	12.10	12.00	11.80	11.70	12.23	13.00	12.90	12.90
Price ratios and dairy ration values:										
Milk-feed 2/	Lb.	1.47	1.59	1.58	1.56	1.53	1.55	1.57	1.55	1.55
Manufacturing grade milk-hog	Lb.	.21	.20	.22	.24	.25	.27	.32	.35	.43
Manufacturing grade milk-beef	Lb.	.20	.17	.15	.15	.15	.17	.18	.18	.20
Value of concentrate ration fed milk cows	Dol.	6.14	---	---	6.51	---	6.68	---	---	7.03
Farm cash receipts from dairy products	Mil. dol.	-- Revised monthly data not available --					14,762	1,226	1,360	
Production of factory products:										
Butter	Mil. lb.	97.2	86.6	89.3	92.4	98.6	985.4	99.1	101.7	
American cheese, whole milk	Mil. lb.	189.6	166.0	185.3	192.0	210.6	2,187.3	176.5	194.5	
Cheese, other than American	Mil. lb.	114.0	110.1	137.7	125.7	129.1	1,522.4	121.3	146.6	
Canned milk, unskimmed	Mil. lb.	69.1	56.8	63.0	72.0	80.6	787.8	58.3	62.0	
Dry whole milk	Mil. lb.	7.2	5.8	8.0	9.3	8.3	84.3	6.1	8.1	
Frozen products 3/	Mil. gal.	95.6	76.9	99.3	97.2	108.6	1,157.6	80.0	94.2	
Creamed cottage cheese	Mil. lb.	74.2	65.5	79.9	72.4	77.0	847.9	68.5	72.2	
Total whole milk equivalent 4/	Mil. lb.	5,847	5,016	5,743	5,837	6,373	65,883	5,488	6,081	
Nonfat dry milk, human use	Mil. lb.	94.7	54.9	76.1	87.8	104.8	907.3	75.8	90.1	
Wholesale prices:										
Butter, Grade A, Chicago, pound	Ct.	105.2	111.3	114.1	120.7	121.8	122.4	130.3	130.4	134.3
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct.	102.6	118.6	119.7	121.3	121.1	123.8	126.0	129.6	131.4
Evaporated milk, case	Dol.	16.09	17.36	17.48	17.49	17.70	17.92	19.17	19.20	19.64
Dry whole milk, pound	Ct.	86.4	98.1	97.7	98.4	98.8	101.4	105.9	106.0	
Nonfat dry milk, pound	Ct.	70.5	76.6	77.2	78.8	79.4	80.0	83.9	84.1	
Dairy products (BLS)	1967=100	184.5	203.1	204.8	207.0	207.9	211.2	221.2	223.3	227.8
Retail prices (BLS):										
Consumer price index 5/	1967=100	191.5	207.1	209.1	211.5	214.1	217.4	236.4	239.8	
All food 5/	1967=100	207.5	228.2	230.4	232.3	234.3	234.5	244.9	247.3	
All dairy products 5/	1967=100	181.6	200.6	201.5	202.4	203.8	207.1	219.5	220.3	
Fluid milk and cream	12/77=100	102.7	113.5	113.8	114.0	114.7	116.8	123.7	124.1	
Whole milk	1967=100	168.3	186.0	186.5	186.5	188.1	191.4	203.2	204.0	
Other	12/77=100	102.3	113.2	113.6	114.1	114.3	116.4	122.7	122.7	
Manufactured dairy products	12/77=100	102.6	113.2	114.0	114.9	115.8	117.4	124.5	125.1	
Butter	1967=100	173.3	193.3	194.5	196.6	199.4	202.9	218.3	218.3	
Cheese	12/77=100	102.5	113.9	114.6	115.5	116.3	117.7	124.2	124.9	
Frozen desserts	12/77=100	102.1	112.7	113.4	114.3	115.2	117.0	124.6	125.1	
Other	12/77=100	102.9	110.2	111.0	111.9	112.7	114.0	120.9	121.6	
Margarine	1967=100	221.6	235.2	235.5	236.7	238.8	240.3	247.9	248.8	
Stocks, end of month:										
Creamery butter	Mil. lb.	246.2	214.8	210.1	218.2	239.7	---	203.3	209.6	
Cheese, total 6/	Mil. lb.	457.1	465.4	453.5	463.0	504.9	---	511.2	506.2	
Canned milk, unskimmed	Mil. lb.	57.4	56.4	49.6	68.4	90.4	---	74.1	76.5	
Dry whole milk	Mil. lb.	7.3	4.6	4.3	5.8	7.1	---	4.6	6.1	
Total whole milk equivalent 7/	Mil. lb.	9,564	8,920	8,689	9,006	9,912	---	9,096	9,190	
Nonfat dry milk	Mil. lb.	686.6	549.3	523.3	518.1	524.6	---	448.6	442.9	
Commercial disappearance:										
Creamery butter	Mil. lb.	79.2	78.8	85.8	70.7	63.6	895.8	86.1	90.3	
Cheese, American	Mil. lb.	169.3	157.5	190.7	176.6	170.2	2,110.5	159.6	177.7	
Cheese, other than American	Mil. lb.	124.4	113.6	148.3	141.4	140.6	1,725.5	124.2	154.4	
Canned milk, unskimmed	Mil. lb.	62.0	64.9	68.5	51.4	57.0	765.4	58.6	58.8	
Milk in all products	Mil. lb.	9,898	8,961	10,422	9,875	9,954	120,372	9,400	10,340	
Nonfat dry milk	Mil. lb.	37.6	50.6	65.7	32.6	34.5	601.7	49.3	63.1	
USDA net removals:										
Butter	Mil. lb.	24.4	2.0	---	13.6	26.8	81.6	10.4	4.0	51.8
Cheddar cheese	Mil. lb.	1.8	- .3	---	9/	1.7	40.2	22.1	22.6	23.7
Nonfat dry milk	Mil. lb.	27.6	1.1	.8	21.3	44.8	255.3	32.1	26.2	59.6
Evaporated milk	Mil. lb.	1.9	1.6	1.3	1.9	1.7	16.4	1.2	.8	1.5
Total whole milk equivalent	Mil. lb.	525	41	3	285	574	1,311	435	307	1,306
Fluid sales, change from year earlier: 8/										
Whole milk	Pct.	-1.6	-2.8	-1.4	-3.9	-3.5	-2.5	-3.6	-4.7	
Low-fat and skim milk	Pct.	+8.8	+5.2	+5.4	+3.3	+3.5	+4.4	+3.9	+4.4	
Total fluid milk	Pct.	+2.0	+ .3	+1.4	-1.2	- .9	- .2	- .5	-1.0	
Cream and cream mixtures	Pct.	-10.2	- .5	-1.7	- .2	- .4	+1.3	+3.2	N.A.	

1/ Seasonally adjusted prices as percentage of parity price.
2/ Different series than formerly published.
3/ Ice cream, ice milk, and sherbet.
4/ Includes manufactured products for which current monthly series are available.
5/ For all urban consumers starting January 1978.
6/ Natural, plus process American cheese held by CCC.
7/ Excludes cream and bulk condensed milk.
8/ Daily average sales in Federal and State Marketing areas.
9/ Less than 50,000 pounds.
N.A. Not Available

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